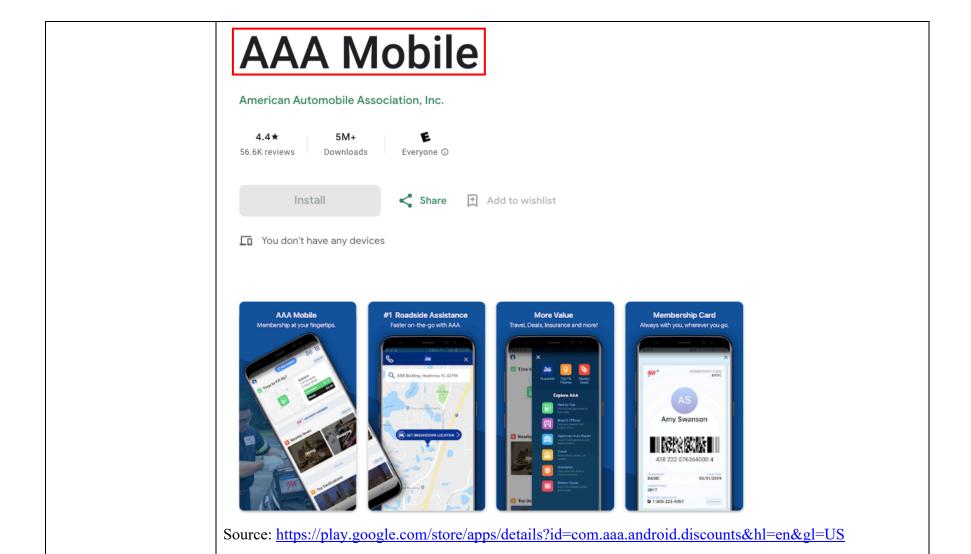
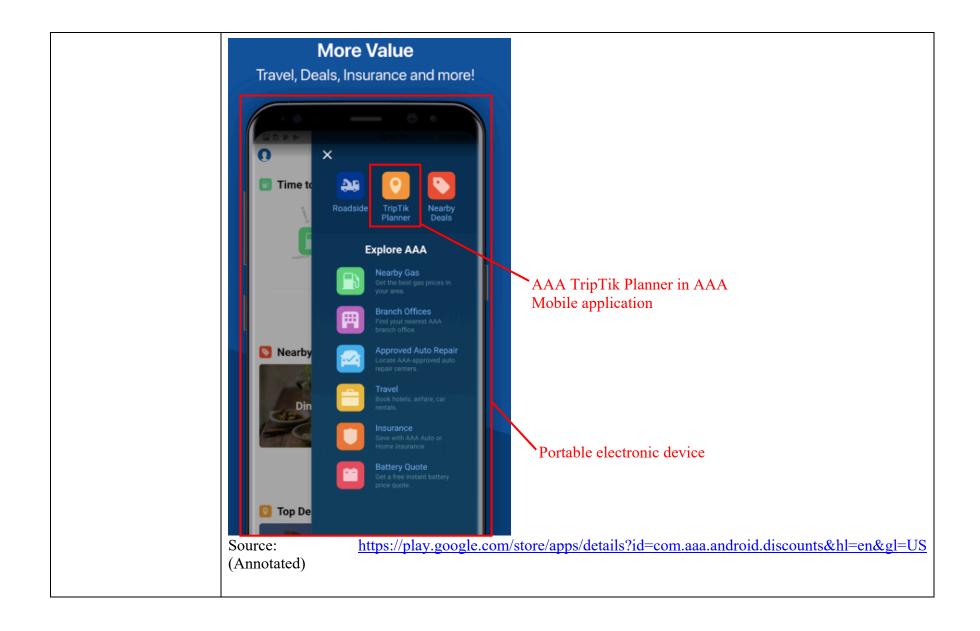
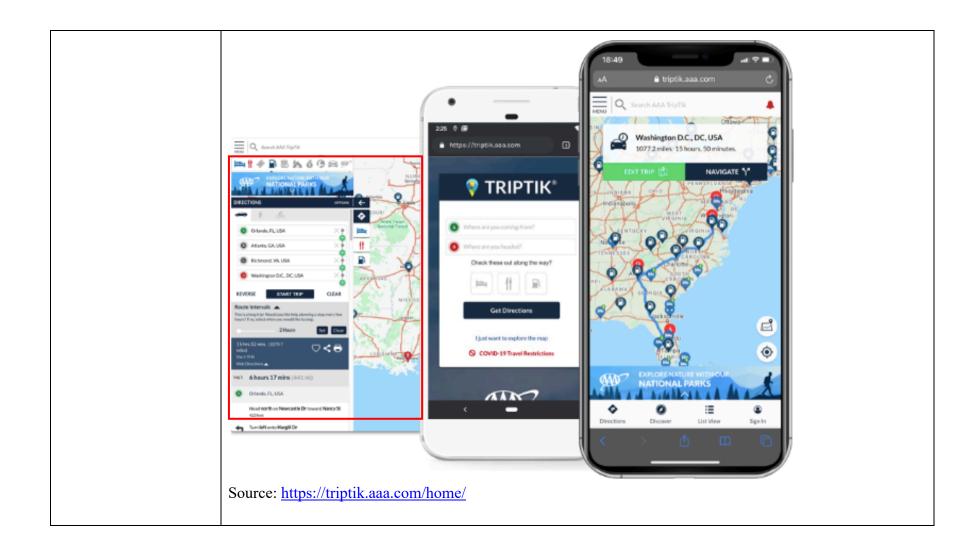
U.S. Patent No. 8,651,369 v. American Automobile Association, Inc. (AAA) Claim 1

1. Claim Chart

	Claim		Analysis
[1.P] comprisi		nethod,	American Automobile Association, Inc. (AAA) ("Company") performs and induces others to perform a method for enabling a portable electronic device to retrieve and display information by detecting the symbology.
			This element is infringed literally, or in the alternative, under the doctrine of equivalents.
			For example, the Company provides AAA Mobile application with TripTik Planner that induces a user to enable a portable electronic device, including, but not limited to, mobile phone and tablet to retrieve and display information, such as route maps, by detecting a symbology (QR code) from a TripTik booklet.



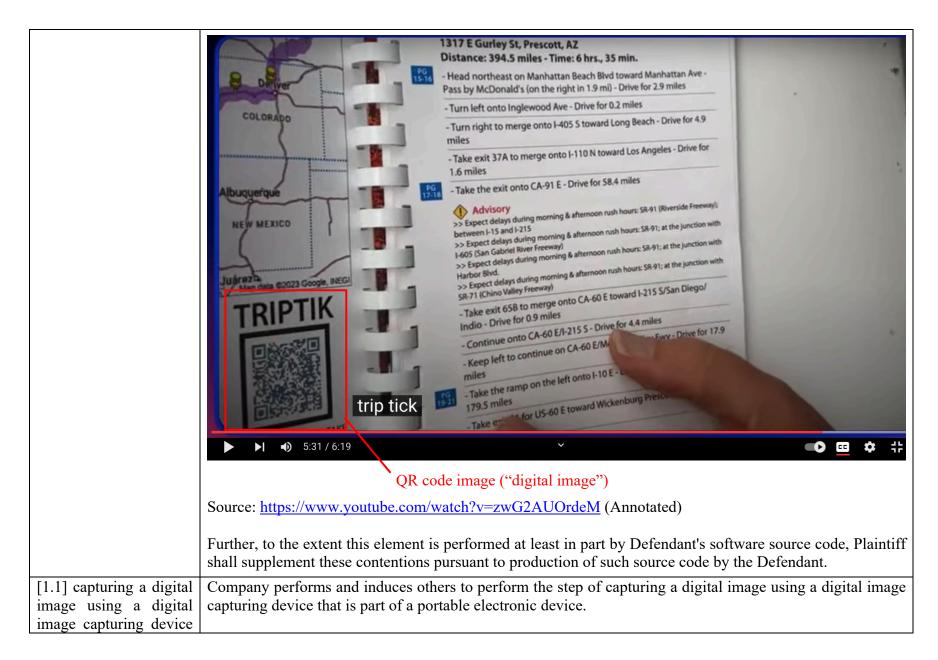






AAA TripTik booklet

Source: https://youtu.be/zwG2AUOrdeM?t=61 (Annotated)



that is part of a portable electronic device;

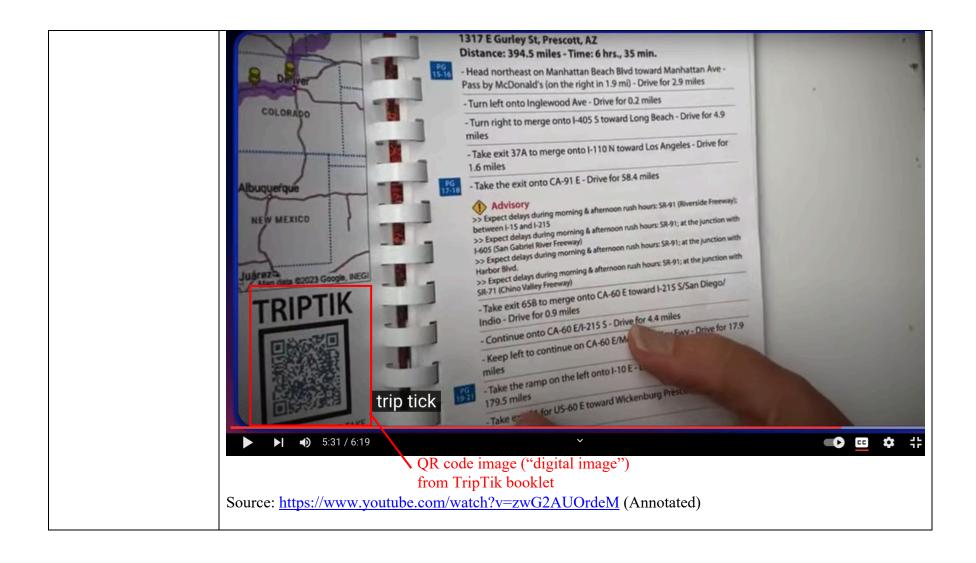
that is part of a portable | This element is infringed literally, or in the alternative, under the doctrine of equivalents.

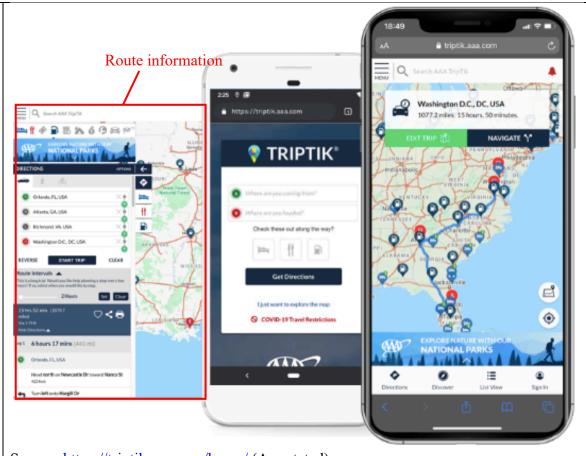
For example, the AAA TripTik booklet provides QR code, such that it would be apparent to a person having ordinary skill in the art that AAA induces the user to capture and scan the QR code image ("digital image") through a built-in camera ("digital image capturing device") of the user's mobile phone ("portable electronic device") to get route information for navigation.



AAA TripTik booklet

Source: https://youtu.be/zwG2AUOrdeM?t=61 (Annotated)





Source: https://triptik.aaa.com/home/ (Annotated)

Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Defendant.

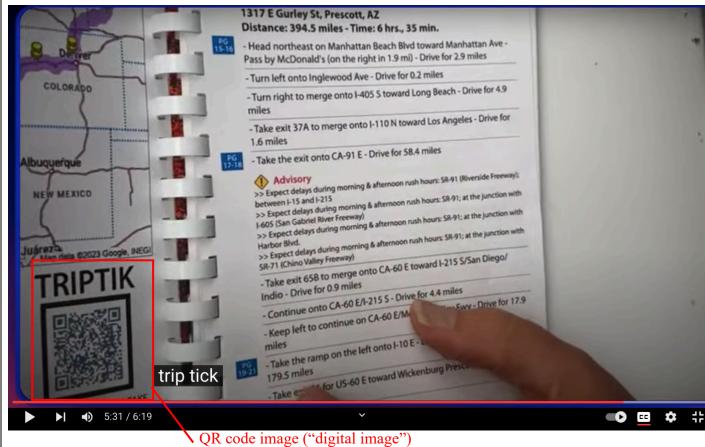
[1.2] detecting symbology associated with the digital image

Company performs and induces others to perform the step of detecting symbology associated with the digital image using a portable electronic device.

using a portable electronic device;

This element is infringed literally, or in the alternative, under the doctrine of equivalents.

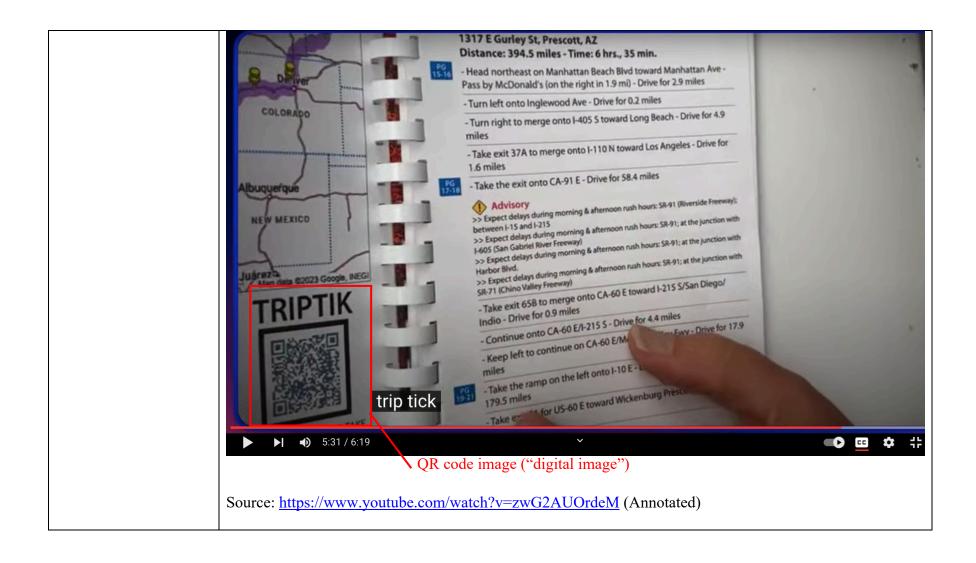
For example, the AAA induces the user to use built-in camera of the user's mobile phone ("portable electronic device") to detect and scan the QR code ("symbology") from the QR code image ("digital image") of the AAA TripTik booklet.

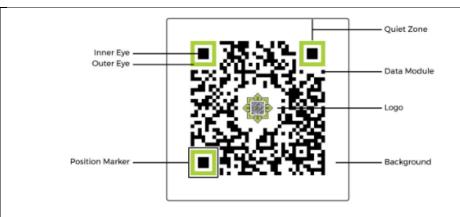


VQK code image (digital image)

Source: https://www.youtube.com/watch?v=zwG2AUOrdeM (Annotated)

	Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff
	shall supplement these contentions pursuant to production of such source code by the Defendant.
[1.3] decoding the	Company performs and induces others to perform the step of decoding the symbology to obtain a decode string
symbology to obtain a	using one or more visual detection applications residing on the portable electronic device.
decode string using one	
or more visual detection	This element is infringed literally, or in the alternative, under the doctrine of equivalents.
applications residing on	
the portable electronic	For example, the AAA induces the user to scan the QR code from the TripTik booklet using the built-in camera
device;	application ("visual detection applications") of the mobile phone ("portable electronic device") and decodes
	it at the backend, such that the scanning involves interpretation of the black and white patterns of the QR code
	to extract the embedded data. The extracted data is converted into a machine-readable data which contains a
	unique identifier ("decode string"). Therefore, it is apparent for a person having ordinary skill in the art that
	the camera application decodes the QR code to obtain the unique identifier at the backend using the camera
	application of the mobile phone.





Parts of a QR code

The most important parts of a QR code are:

• Data module. This is the standard unit of the QR code. It's typically

a black square set against a white background. Though the colors and contrast can be different, black-on-white is the most optimal when creating a <u>custom QR code</u>. The arrangement of these black

squares, or data modules, is what makes up the majority of a QR code.

Source:

https://www.sproutqr.com/blog/how-do-qr-codes-

work#:~:text=In%20the%20QR%20code%2C%20the,back%20to%20the%20original%20URL.

In the QR code, the arrangement of the squares—or data modules, as they're called—is actually our URL. It's just been translated from the alphanumeric string of the URL into a collection of squares. That's how you go from link to QR code. A QR code scanner will then translate it back to the original URL.

 $\label{eq:source:https://www.sproutqr.com/blog/how-do-qr-codes-work#:~:text=In%20the%20QR%20code%2C%20the,back%20to%20the%20original%20URL.}$

QR codes consist of black squares arranged in a grid (matrix) on a white background and are read by specialized software that is able to extract data from the patterns that are present in the matrix. These codes are capable of containing more information than traditional barcodes, and primarily handle four modes of data: alphanumeric, numeric, binary, and Kanji.

Source: https://www.investopedia.com/terms/q/quick-response-qr-code.asp

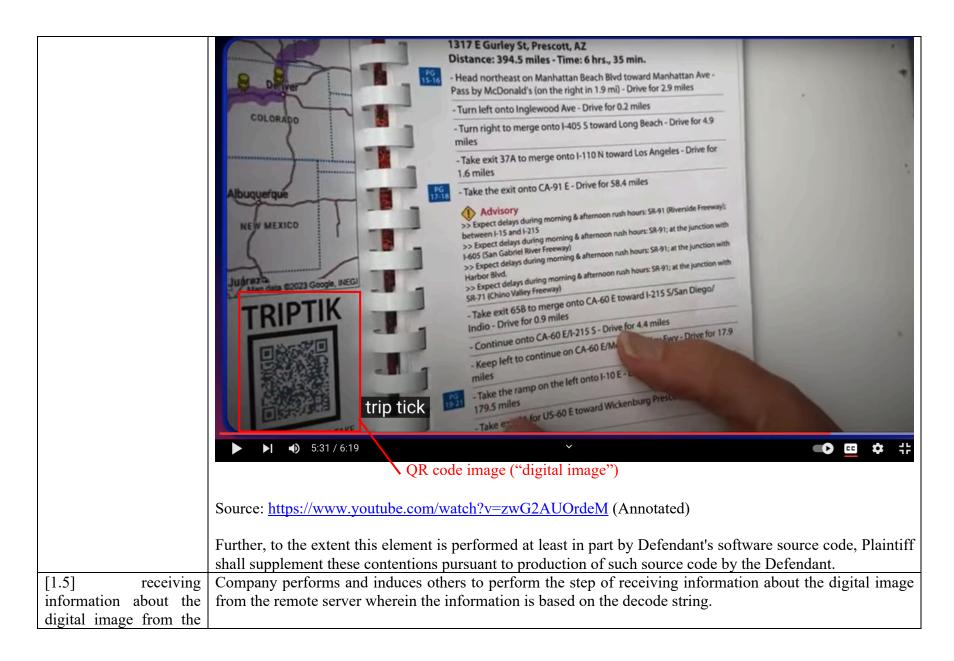
Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Defendant.

[1.4] sending the decode string to a remote server for processing; Company performs and induces others to perform the step of sending the decode string to a remote server for processing.

This element is infringed literally, or in the alternative, under the doctrine of equivalents.

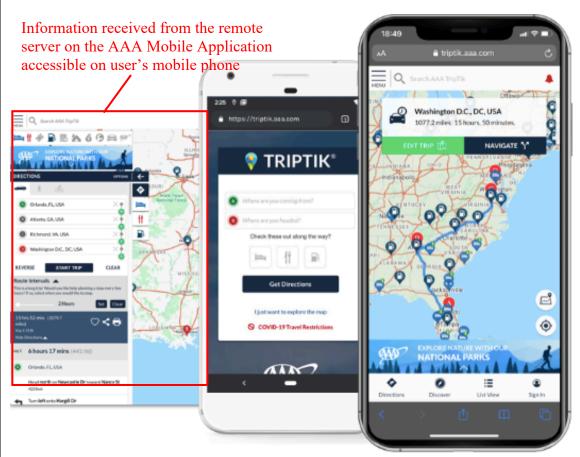
For example, upon QR code detection, the AAA Mobile application displays the route information on the user's mobile phone for navigation. It would be apparent to a person having ordinary skill in the art that in the process, the AAA induces the user to decode the QR code into a unique identifier ("decode string") and send it to a remote server for processing.





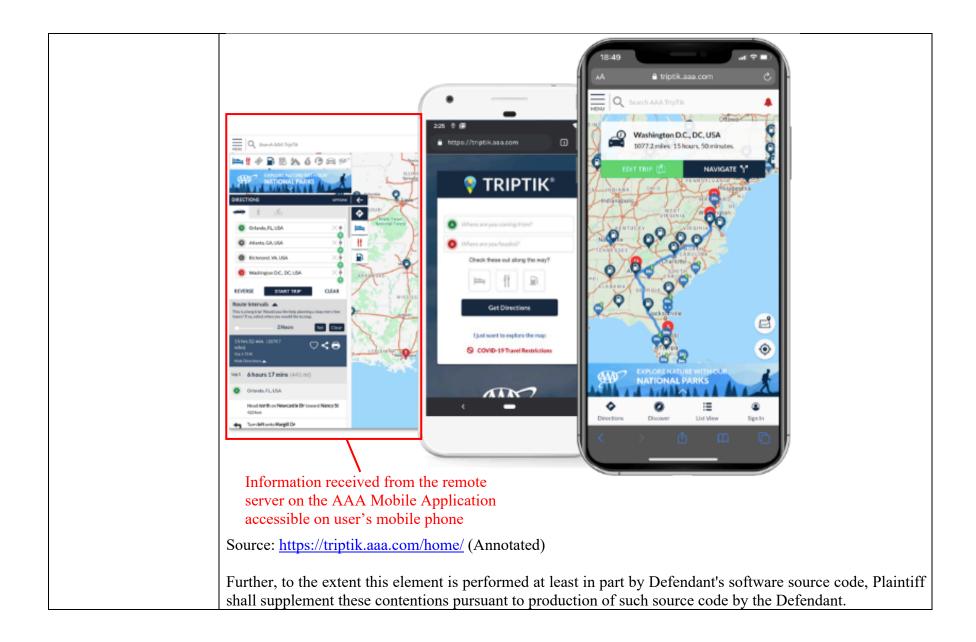
remote server wherein the information is based on the decode string; This element is infringed literally, or in the alternative, under the doctrine of equivalents.

For example, the AAA Mobile Application accessible on the user's mobile phone induces the user to receives the maps information from the remote server that is based on the decoded QR code from the TripTik booklet.



Source: https://triptik.aaa.com/home/ (Annotated)

	Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff
	shall supplement these contentions pursuant to production of such source code by the Defendant.
[1.6] displaying the	Company performs and induces others to perform the step of displaying the information on a display device
information on a display	associated with the portable electronic device.
device associated with	
the portable electronic	This element is infringed literally, or in the alternative, under the doctrine of equivalents.
device.	
	For example, the AAA induces the user to receive and display the route information on the screen ("display device") of ("associated with") the user's mobile phone ("portable electronic device").



2. List of References

- 1. https://play.google.com/store/apps/details?id=com.valvesoftware.android.steam.community, last accessed on December 19, 2023.
- 2. https://triptik.aaa.com/home/, last accessed on December 19, 2023.
- 3. https://www.youtube.com/watch?v=zwG2AUOrdeM, last accessed on December 19, 2023.
- 4. https://www.sproutqr.com/blog/how-do-qr-codes-work#:~:text=In%20the%20code%2C%20the,back%20to%20the%20original%20URL, last accessed on December 19, 2023.
- 5. https://www.investopedia.com/terms/q/quick-response-qr-code.asp, last accessed on December 19, 2023.